HUMMINGBIRD
class Aves
order Apodiformes

BEE
class Insecta
order Hymenoptera

BUTTERFLY
class Insecta
order Lepidoptera

BAT
class Mammalia
order Chiroptera

EARTH ◆ DAY 2009

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It would be difficult to imagine not including apples, melons, nuts, coffee, berries, avocados, sunflowers, or chocolate in our diets but in order to enjoy these and other fruits and vegetables, pollinators must be at work in our gardens and fields. Pollinators are those tiny, busy creatures that help plants reproduce. As they travel from bloom to bloom in search of nectar, they transfer the essential pollen, fertilizing each plant, and enabling the plants to produce their fruits and flowers.

In addition to the most prevalent pollinators, the bees, others include bats, butterflies, moths, hummingbirds, flies, and beetles.

Currently, 70 percent of the world's leading crops benefit from animal pollination.

Although pollination can be accomplished by wind or self-pollination, by far the most robust fruits, vegetables, and nuts are pollinated by bees, the small 'traveling farm workers.' From almonds to zucchini, there are between 2.15 million and 3 million hives at work, courtesy of the U.S. pollination industry. And what an industry it is! In the United States alone, commercial production of more than 100 crops depends on honeybees. But a recent tragedy impacted the bees, the industry, and crops as well.

In the U.S. for example, in the fall of 2006, a mysterious threat to bees was first noticed. For no apparent reason bees have been abandoning their hives, leaving the queen and the young. This is called colony collapse disorder (CCD).

Farmers, scientists, and environmentalists met this past year to promote public awareness for what some say is a potential heath crisis for the planet.

Scientists are not sure what has caused CCD, one suspect is an increased use of pesticides. Another possibility is that the bees have become infected by a variety of ills—bacteria, fungi, viruses, parasites.

In recent years a national conservation group has presented an annual Farmer-Rancher Pollinator Conservation Award to a family or individual who has contributed to the protection of working and wild lands. A recent winner developed farming practices that require smaller amounts of pesticides and apply them only after sunset so that the foraging bees would be safely home and not exposed to the chemicals. In addition to protecting the bees, this farmer made a butterfly garden and planted a wild-flower meadow on his property.

In our efforts to promote a more sustainable planet and to protect our ecosystems, there are some ways we can help the pollinators.

While there is continued study and examination of the causes of pollinator decline, it is essential to improve and protect the habitats of pollinating animals. We must make sure that there are areas left wild on the edges of cultivated land so that pollinators can make their homes. We must reduce the use of powerful chemical insecticides. It will take attention, planning, and proper care to ensure that we can continue to depend upon our natural pollinators to provide a vast array of agriculture for the world to enjoy.